

Work Order ID 132211

Friday, May 01, 2015 1:49:23 PM

132211

Page 1

Item ID: D350-602-011

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Heli-Utility-Pod™ (Fits LH or RH)

Start Date: 7/3/2015 Start Qty: 1.00

1

Cust Item ID:

Required Date: 7/3/2015 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

*CL*Date: **MAR 01 2015**

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
DSI 9515	B

**DAS
6
9-89***MCS 1604-12*

100

100

DC

Doc.Control -USB or Paperwork

Document Control

0.00

DOCUMENT CONTROL

Memo

0.00

Photocopy bluefile & type labels per PPP D350-602-011 CHG006

**DAS
27
9-89****APR 13 2016**

110

110

Packaging

Packaging

Pick Kit

0.00

Memo

0.00

**DAS
6
9-89****DAS
28
9-89****APR 12 2016**

120

120

QC

Quality Control

QC4- 100% Inspect kits for completeness

0.00

Memo

0.00

**DAS
27
9-89****APR 13 2016**

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabelled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

Work Order ID 132211

Friday, May 01, 2015 1:49:23 PM

132211

Page 2

Item ID: D350-602-011 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Heli-Utility-Pod™ (Fits LH or RH)
Start Date: 7/3/2015 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 7/3/2015 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00							
130	Memo	0.00							
Packaging	Identify and pack for shipping as per PPPD350-602-011								
Packaging	Location: _____ PPP Rev: _____								
		<i>Sold</i>							
140	QC21- Final Inspection - Work Order Release	0.00							
140	Memo	0.00							
QC									
Quality Control									

SMB
10/31/13

MCS **APR 13 2016**

MCS **APR 13 2016**

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																		
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																		
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																		
Large Fab ☐	Composite ☐	Supplier ☐																			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval																	
Description Work Order Deviation		Disposition		Completed By																	
				Lead hand / Supervisor Approval Verification																	
				QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabelled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐																
OTHER : _____																					

Picklist Print

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Page 1

Work Order ID: 132211

132211

Parent Item: D350-602-011

D350-602-011

Parent Item Name: Heli-Utility-Pod™ (Fits LH or RH)

Start Date: 7/3/2015

Required Date: 7/3/2015

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:F Removed Travellers 06-04-06 JLM
IPP Rev:G Added D3495-1 06-05-17 JLM
AS PER ECN10-558 10-04-27 JLM VERIFIED BY:DD

IPP REV:H

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2324		Manufactured	No			110	Each	24.0000	1	1			
D2324													
Strut Assy													

DAS
27
9-89

Location	Loc Qty	Loc Code
ST367	8	
120341	8	
ST370a	16	
130989	16	

D2694		Manufactured	No			110	Each	0.0000	1	1			
D2694													
Pod, 350/407													
D4091-1		Manufactured	No			110	Each	1.0000	4	4			

D4091-1

Mounting Lug DAS
27
9-89

Location	Loc Qty	Loc Code
ST522	1	
128425	1	

D3910-3		Manufactured	No			110	Each	83.0000	4	4			
D3910-3													
X-Tube Lug													

DAS
27
9-89

Location	Loc Qty	Loc Code
ST524	8	
110324	8	
ST525A	75	
117781	75	

DAS
28
9-89

DAS
6
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabelled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

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Work Order ID: 132211

Parent Item: D350-602-011

Parent Item Name: Heli-Utility-Pod™ (Fits LH or RH)

132211

D350-602-011

Start Date: 7/3/2015

Required Date: 7/3/2015

Start Qty: 1.00

Required Qty: 1.00

D2258-160

Manufactured No

110

Each

6.0000

1 1

D2258-160

Placard

**

139695

DAS
27
9-89
DAS
28
9-89

Location

Loc Qty

Loc Code

ST005

6

110345

6

D2523

Manufactured No

110

Each

4.0000

2 2

D2523

Mounting Bracket

**

DAS
27
9-89
DAS
28
9-89

Location

Loc Qty

Loc Code

ST445

4

113708

4

D2524

Manufactured No

110

Each

4.0000

2 2

D2524

Bracket Clamping

**

DAS
27
9-89
DAS
28
9-89

Location

Loc Qty

Loc Code

ST481

4

128952

4

D3495-1

Manufactured No

110

Each

11.0000

1 1

D3495-1

Placard

**

DAS
27
9-89

Location

Loc Qty

Loc Code

ST042

11

129989

11

1

APR 12 2016
DAS
28
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By 					
				Lead hand / Supervisor Approval Verification 					
				QC / QA Coordinator Approval 					

Root Cause				FAULT CATEGORY			
☐ Environment	☐ Design	☐ Doc/Data	☐ Equip/Tooling	☐ Handling/Pre	☐ Material	☐ Internal Transport	☐ Tribal Knowledge
☐ No Re-verification	☐ Operator	☐ Offset/Setup	☐ Supplier	☐ Training	☐ Use for Testing	☐ Poor Information	☐ Rushing
☐ Pressure/Forced	☐ Bending	☐ Centre Not Concentric	☐ Cracks	☐ Crimp/K nk/Ripple/Wave	☐ Cuffs	☐ Crushing	☐ Heat Treat
☐ Temperature/Cure	☐ Set-up	☐ BOM/Route	☐ Broken/Damage/Defect	☐ Inspection Incomplete/Unqualified	☐ Contamination	☐ Countersink	☐ Cut Too Short
☐ Power Loss/Surge	☐ Folio/Program	☐ Grain	☐ Weld	☐ Wrong Stock Pulled	☐ Out of Sequence	☐ Off-set	☐ Mislabeled
☐ Positioned Wrong	☐ Outside Dimensions	☐ Over/Under tolerance	☐ Part Incorrect	☐ Part Lost/Missing	☐ Part Moved	☐ Drawing	☐ Finish
☐ Misread	☐ Turning Sequence						
☐ Past Expiry Date	☐ Misidentified	☐ Manufacturing Process	OTHER : _____				
☐ Past Due	☐ OTHER :						

Picklist Print

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Work Order ID: 132211

132211

Parent Item: D350-602-011

D350-602-011

Parent Item Name: Heli-Utility-Pod™ (Fits LH or RH)

Start Date: 7/3/2015

Required Date: 7/3/2015

Start Qty: 1.00

Required Qty: 1.00

D3984 Manufactured No

110

f

14.0000

2

2

D3984

Rubber Extrusion, X-Tube, Per Foot

**

143998

DAS
6
28
9-89

Location

Loc Qty

Loc Code

ST413

14

115196

14

DAS
27
9-89
CUT 8 AT 3.00

AN3-7A

Purchased No

110

Each

184.0000

4

4

AN3-7A

Bolt

**

132763

DAS
6
28
9-89

Location

Loc Qty

Loc Code

ST349

184

131420

177

M129706

7

DAS
27
9-89
AN3-15A

Purchased No

110

Each

18.0000

8

8

AN3-15A

Bolt

**

132551

DAS
6
28
9-89

Location

Loc Qty

Loc Code

FG

10

114941

10

ST348

8

M128429

8

AN4-12A

Purchased No

110

Each

233.0000

1

1

AN4-12A

Bolt

**

134180

DAS
6
28
9-89

Location

Loc Qty

Loc Code

FG

10

120423

10

ST344

223

M131803

1

m131957

222

DAS
27
9-89

APR 12 2016

DAS
6
28
9-89

Friday, May 01, 2015 1:49:22 PM

Shop Packet Print

Page 3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabelled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : ☐			

Picklist Print

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Work Order ID: 132211

132211

Parent Item: D350-602-011

D350-602-011

Parent Item Name: Heli-Utility-Pod™ (Fits LH or RH)

Start Date: 7/3/2015

Required Date: 7/3/2015

Start Qty: 1.00

Required Qty: 1.00

AN4-14A Purchased No

110 Each 258.0000 16 16

AN4-14A

Bolt

**

133998

DAS

9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

FG	5	
122141	5	
ST325A	107	
131677	2	
M131153	5	
M132189	100	
ST344	146	
M130716	15	
M131803	131	

DAS
27
9-89

AN4-16A Purchased No

110 Each 82.0000 4 4

AN4-16A

Bolt

**

134502

DAS

6
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

FG	5	
121541	5	
ST343	77	
M128813	4	
M132035	73	

DAS
27
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By 					
				Lead hand / Supervisor Approval Verification 					
				QC / QA Coordinator Approval 					

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling ☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre ☐	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material ☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport ☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge ☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA ☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation ☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date ☐	☐	Manufacturing Process	☐	OTHER : 			
Misidentified ☐	☐	Past Due	☐				

Picklist Print

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Work Order ID: 132211

132211

Parent Item: D350-602-011

D350-602-011

Parent Item Name: Heli-Utility-Pod™ (Fits LH or RH)

Start Date: 7/3/2015

Required Date: 7/3/2015

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0363J

Purchased

No

110

Each

1,673.000

24

24

NAS1149D0363.J

Washer

134370

DAS

6

9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

CA

569

m130799

569

FP001

2

113288

2

GA

292

m128429

292

ST269

810

m126319

9

m131618

801

DAS

28

9-89

NAS1149D0463J

Purchased

No

110

Each

4,697.000

42

42

NAS1149D0463.J

WASHER

134573

DAS

6

9-89

DAS

28

9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

41

M129390

41

ST269

4656

M129682

86

M130799

371

M132035

4199

APR 12 2015

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Shop Packet Print

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :			MRB (QSI042) Approval
Description Work Order Deviation		Disposition			Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabelled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : ☐			

Picklist Print

Friday, May 01, 2015 1:49:23 PM

Page 6

Work Order ID: 132211

132211

Parent Item: D350-602-011

D350-602-011

Parent Item Name: Heli-Utility-Pod™ (Fits LH or RH)

Start Date: 7/3/2015

Required Date: 7/3/2015

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased

No

110

Each

2,157.000

12

12

DAS

6

9-89

MS21042L3

Nut

**

134360

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

FP001

420

M130922

420

GA

602

M131317

602

ST305

1135

116549

12

126333

49

M128754

2

M131624

72

st305

1000

MS21042L4

Purchased

No

110

Each

2,461.000

21

21

DAS
6
9-89

DAS
28
9-89

MS21042L4

Locknut

**

135502

DAS
27
9-89

Location

Loc Qty

Loc Code

FP001

42

m124231

42

GA

224

m127813

224

ST260a

62

m130799

56

m131803

6

ST305

2133

m128300

8

m130388

16

m130922

97

m131618

12

m132123

2000

APR 17 1989

Friday, May 01, 2015 1:49:23 PM

Shop Packet Print

Page 6

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-602 REV E (OR EARLIER REV.)
AND INSTRUCTIONS FOR CONTINUOUS AIRWORTHINESS ICA-D350-602 REV. 0

REF. TCCA STC: SH93-97

REF. FAA STC: SR01144NY

REF. EASA STC: EASA.IM.R.S.01290

PURPOSE

Dart Heli-Utility-Pods D350-602-011 @ CHG 006 and D350-602-013/-014 @ CHG 002 have new attachment lugs.

CHANGE

The D2230-1/-3 clamps are replaced with wider D4091-1/D3910-3 lugs. The abrasion strip is replaced with D3984-030 rubber extrusion. The D2462-1700 Neoprene Seal is replaced with D2461-1700 Neoprene 'D' Seal. The modified parts list for Installation Instruction D350-602 and Instructions for Continued Airworthiness ICA-D350-602 is shown on sheet 2 of this service instruction. Install the lugs as shown in Figure 1 & 2 of this service instruction. The pod should otherwise be installed per D350-602 and maintained per ICA-D350-602.

The weight and balance for Dart Heli-Utility-Pods D350-602-011 @ CHG 006 and D350-602-013/-014 @ CHG 002 (or later) are updated as follows:

5.0 WEIGHT AND BALANCE (D350-602 Rev. E)

25.6 WEIGHT AND BALANCE (ICA-D350-602 Rev. 0)

The following weight and balance information is for the Dart *Heli-Utility-Pod™*. The weight and balance of any parts that are removed from the aircraft to perform this installation or equipment installed/stowed in the pods are the responsibility of the installer.

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D350-602-011 @ CHG 006	61.2 lb	±51.0 in	±3121 in-lb	135 in	8262 in-lb
Heli-Utility-Pod™ LH or RH	27.8 kg	±1.29 m	±35.9 m-kG	3.43 m	95.4 m-kG
D350-602-013 @ CHG 002	61.2 lb	-51.0 in	-3121 in-lb	135 in	6872 in-lb
Heli-Utility-Pod™ LH	27.8 kg	-1.29 m	-35.9 m-kG	3.43 m	79.2 m-kG
D350-602-014 @ CHG 002	61.2 lb	+51.0 in	+3121 in-lb	135 in	6872 in-lb
Heli-Utility-Pod™ RH	27.8 kg	+1.29 m	+35.9 m-kG	3.43 m	79.2 m-kG

LUG UPGRADE KIT

The Dart DSI-9515-011 kit is available to upgrade D350-602-XXX Heli-Utility-Pods made to earlier change numbers with D4091-1 / D3910-3 lugs. The lugs should be installed per Figure 1 & 2 of this service instruction.

QTY	Part Number	Description
-011		
X	DSI-9515-011	LUG UPGRADE KIT
4	D4091-1	LUG
4	D3910-3	LUG
8	D3984-030	RUBBER EXTRUSION
16	AN4-14A	BOLT
32	AN960JD416	WASHER (OR NAS1149DO463J)
16	MS21042L4	NUT (OR MS21042-4)

CLIS/05/01
W/O. 132211

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-Q-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 10.04.23
CERT. NO.: SH93-97
ISSUE NO.: 4

B	NAS1149DO463J WAS xDN432J & CHG QTY	CP	10.04.23
A	NEW ISSUE	CP	10.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9515	SHEET 1 OF 4
APPROVED		TITLE	SCALE
DE APPR.		LUG MODIFICATION	NTS
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6.0 PART LIST (D350-602 Rev. E)
25.7 PARTS LIST (ICA-D350-602 Rev. 0)

Qty D350-602 -011	Qty D350-602 -013	Qty D350-602 -014	Qty DSI9052 -013	Part Number	Description
X				D350-602-011	HELI-UTILITY-POD™ (FITS BOTH LH/ RH)
	X			D350-602-013	HELI-UTILITY-POD™, LH
		X		D350-602-014	HELI-UTILITY-POD™, RH
			X	DSI9052-013	QUICK RELEASE KIT
1				D2694	POD ASSEMBLY (LH OR RH)
	1			D3322-041	POD ASSEMBLY (LH)
		1		D3322-042	POD ASSEMBLY (RH)
1	1	1		*D2202-1	POD LID
1				*D2202-3	POD BASE
				*D2202-5	POD BASE
5	5	5		*D2204-9	LATCH
1	1	1		*D2429-041	SPRING CLIP ASSEMBLY
1	1	1		*D2461-1700	NEOPRENE 'D' SEAL
5	5	5		*D2528-1	BACKER PLATE
4	4	4		*D2528-3	BACKER PLATE
1	1	1		*D2569	HINGE
1	1	1		*D3007-041	PROP ASSEMBLY
1	1	1		** D2012-107	CLEVIS
2	2	2		** D2022-101	SPACER
1	1	1		** D2705	SUPPORT BRACKET
1	1	1		** D3007-1	STRUT
1	1	1		** D3015-3	LOCKNUT
1	1	1		** AN4-10A	BOLT
1	1	1		** AN960JD416	WASHER
1	1	1		** MS21042L4	NUT (OR MS21042-4)
1	1	1		** SL69-BS	BALL STUD
1	1	1		** AN960JD516	WASHER
19	19	19		AN4-5A	BOLT
1	1	1		AN4-6A	BOLT
2	2	2		AN526C632R7	SCREW
21	21	21		AN960JD416	WASHER
2	2	2		AN960JD6	WASHER
2	2	2		MS21042L06	NUT (OR MS21042-06)
20	20	20		MS21042L4	NUT (OR MS21042-4)
4	4	4		D4091-1	LUG
4	4	4		D3910-3	LUG
1	1	1		D2258-160	LABEL
1	1	1		D2324-1	STRUT ASSEMBLY
2	2	2		D2523	MOUNTING BRACKET
2	2	2		D2524	SIDE PLATE
1	1	1		D3495-1	PLACARD
8	8	8		D3984-030	RUBBER EXTRUSION
4	4	4		AN3-7A	BOLT
8	8	8		AN3-15A	BOLT
1	1	1		AN4-12A	BOLT
16	16	16		AN4-14A	BOLT
4	4	4		AN4-16A	BOLT
24	24	24		AN960JD10	WASHER
42	42	42		AN960JD416	WASHER
12	12	12		MS21042L3	NUT (OR MS21042-3)
21	21	21		MS21042L4	NUT (OR MS21042-4)
			1	BLRS-010	QUICK RELEASE PIN (1" GRIP)
			3	BLRS-020	QUICK RELEASE PIN (1.5" GRIP)

* INCLUDED IN D2694 OR D3322-041/-042 POD ASSEMBLIES LISTED ABOVE

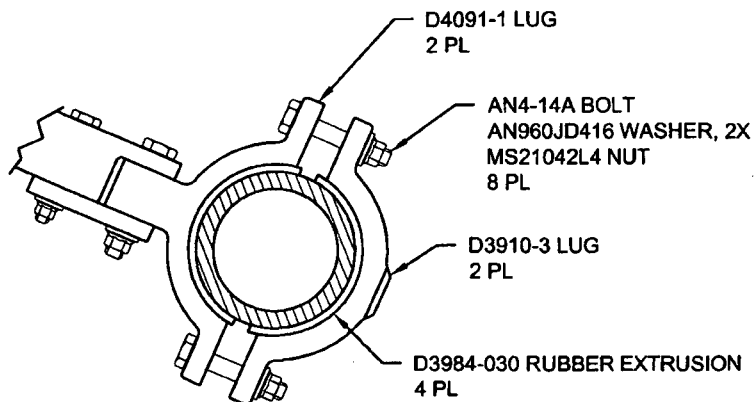
** INCLUDED IN D3007-041 PROP ASSEMBLY LISTED ABOVE

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: 
D. SHEPHERD (DE # 02)

DATE: 10.04.23
CERT. NO.: SH93-97
ISSUE NO.: 4

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9515	SHEET 2 OF 4
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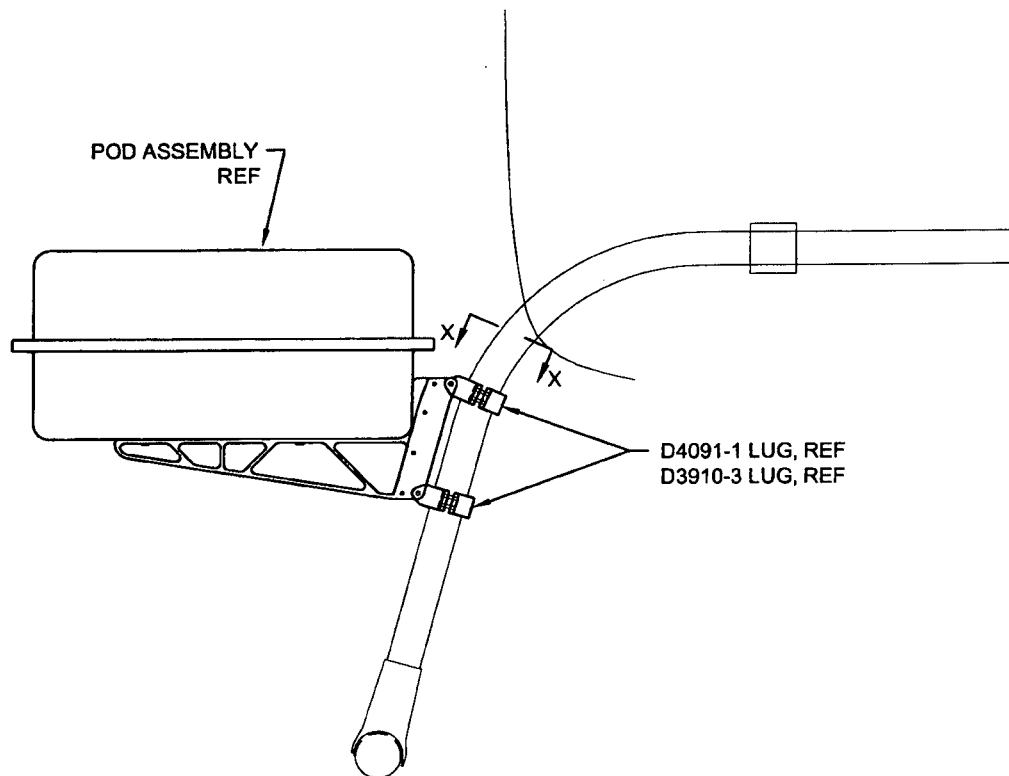


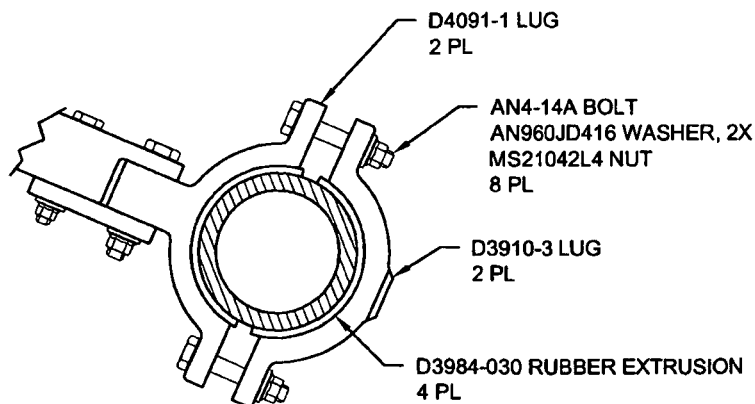
FIGURE 1: Aft Crosstube Attachment
(Installation of D4091-1 / D3910-3 Lugs)

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 10.04.23
CERT. NO.: SH93-97
ISSUE NO.: 4

DESIGN		DART AEROSPACE LTD	
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CHECKED		DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9515	SHEET 3 OF 4
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SECTION X-X
NOT TO SCALE

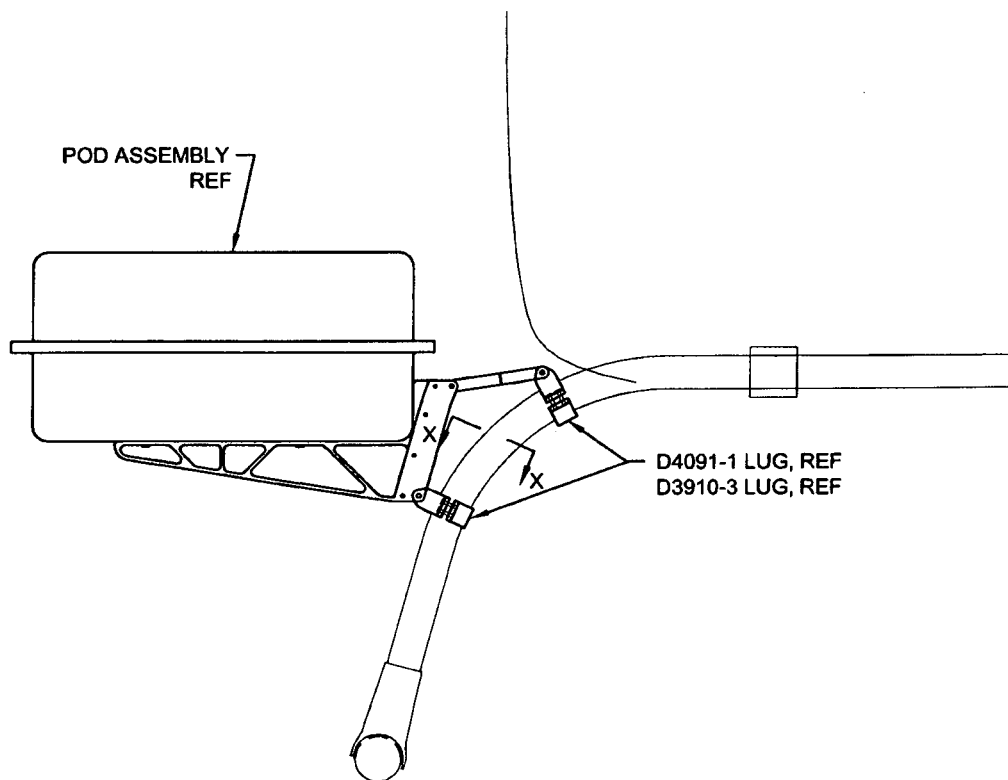


FIGURE 2: Fwd Crosstube Attachment
(Installation of D4091-1 / D3910-3 Lugs)

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 10.04.23
CERT. NO.: SH93-97
ISSUE NO.: 4

DESIGN	<i>92</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>92</i>		
CHECKED	<i>92</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>N/A</i>	DSI 9515	SHEET 4 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
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FDC Composites inc.
45, Chemin de L'Aéroport
Local 26
Saint-Jean-sur-Richelieu (QC)
J3B 7B5
Tél.: 450 357-1344

Bon de livraison

31/03/2016

Commande : 2402
Référence : PO #28357/14-17

Client : Dart

DART AEROSPACE
1270 Aberdeen Street
Hawksbury, ON
K6A 1K7

Expédier à

Même

Tél.: 1 613 632-9577

No item	Description	Qté	Qté livrée	Qté B/O
132210	D2694 Pods, Repair PO item: 28357/14 Replacement doubler will be inside Of pods D3001-1 B128993 x 3 pcs Price for phase 1 (975.00 \$) Price for phase 2 (875.00 \$)	1	/	
132209	D2694 Pods, Repair PO item: 28357/15 Replacement doubler will be inside Of pods D3001-1 B128993 x 3 pcs Price for phase 1 (975.00 \$) Price for phase 2 (875.00 \$)	1	/	
132216	D3322-041 Pods, Repair PO item: 28357/16 Replacement doubler will be inside Of pods D3001-1 B128993 x 1 pcs, missing 2 pcs Will ship later this week D3048-1 B140732 x 1 pcs Price for phase 1 (975.00 \$) Price for phase 2 (875.00 \$)	1	/	
132217	D3322-041 Pods, Repair PO item: 28357/17 Replacement doubler will be inside of pods Of pods	1	/	

*** Suite autre page ***

FDC Composites inc.
45, Chemin de L'Aéroport
Local 26
Saint-Jean-sur-Richelieu (QC)
J3B 7B5
Tél. : 450 357-1344

Bon de livraison

31/03/2016

Commande : 2402
Référence : PO #28357/14-17

Client : Dart

Expédier à

DART AEROSPACE
1270 Aberdeen Street
Hawksbury, ON
K6A 1K7

Même

Tél. : 1 613 632-9577

No item	Description	Qté	Qté livrée	Qté B/O
	D3001-1 missing 3 pcs			
	Will ship later this week			
	D3048-1 B140732 x 1 pcs			
	Price for phase 1 (975.00 \$)			
	Price for phase 2 (875.00 \$)			

Transport : _____

Nb colis : _____

Marchandise reçue : _____

Réf. : _____



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CERTIFICATE of CONFORMITY

Customer Name: Dart Aerospace.

Customer P/O Number: 28357

FDC Quote: 1246

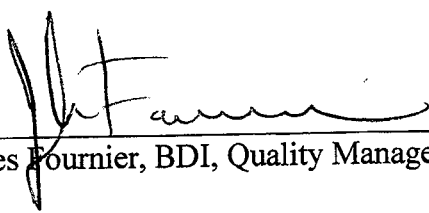
Revision: A

<u>PO Item</u>	<u>Qty</u>	<u>Part number</u>	<u>Dwg number Part</u>	<u>Dart ID</u>	<u>Dwg number Assy</u>	<u>FDC ID</u>	<u>Lot</u>
15	1	D2694 Utility Pod	D2202 Rev.G	B132209	D2694 Rev.I	DAE002-001	2015-11-02
14	1	D2694 Utility Pod	D2202 Rev.G	B132210	D2694 Rev.I	DAE002-003	2015-11-04 FAI
16	1	D3322-041 Utility Pod	D2202 Rev.G	B132216	D3322 Rev.A	DAE002-002	2015-11-03
17	1	D3322-041 Utility Pod	D2202 Rev.G	B132217	D3322 Rev.A	DAE002-004	2015-11-06 FAI

FAI articles: Lines 3&4 and Lines 7&8.

Repaired as per Dart's special instructions: Replacement of doubler inside of pods.

I hereby certify that the workmanship, material and the processes used in the manufacture of the above part(s) supplied are in accordance with the requirements of the applicable Purchase Order.

Signature: 
Jules Fournier, BDI, Quality Manager

Date: 2016-03-31



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

OUTSTANDING PO REPRINT

Purchase Order ID PO28357

Purchase Order Date 5/5/2015

PO Print Date 3/30/2016

Page Number 1 of 3

Order From : VC-FDC01
FDC COMPOSITES INC.
45 CHEMIN DE L'AEROPORT
LOCAL 26
ST-JEAN-SUR-RICHELIEU, QUEBEC J3B 7B5

Ship To : DART AEROSPACE LTD
1270
ABERD
EEN
HAWKE
SBURY,
ON
K6A
1K7
CANAD
A

E-MAILED
MAR 30 2016

Contact Name	Buyer	Chantal Lavoie
Vendor Phone 450-357-1344 ext303	Customer POID	
Vendor Fax 450-357-1194	Customer Tax #	10127-2607
Ship To Contact	Terms	Net 30
Ship To Phone	Currency	CAD
	FOB	Destination-Collect
Ship Method		
Ship Acct		

Line Nbr	Item ID Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable	Req Qty	Extended Price
14	132210	D2694 PODS, REPAIRS	4/6/2016 Yes 4/6/2016	1.00	\$1,850.00
	replacement doubler will be inside of pods D3001-1 B128993 x 3 pcs price for phase #1 975.00\$ price for phase #2 875.00\$				
	Line Total:				\$1,850.00
15	132209	D2694 PODS, REPAIRS	4/6/2016 Yes 4/6/2016	1.00	\$1,850.00
	replacement doubler will be inside of pods D3001-1 B128993 x 3 pcs price for phase #1 975.00\$ price for phase #2 875.00\$				

PO Instructions: QUOTE # 1246

3/30/2016

REFERENCE ONLY

6.0 PART LIST (D350-602 Rev. E)
25.7 PARTS LIST (ICA-D350-602 Rev. 0)

Qty D350-602 -011	Qty D350-602 -013	Qty D350-602 -014	Qty DSI9052 -013	Part Number	Description
X				D350-602-011	HELI-UTILITY-POD™ (FITS BOTH LH/ RH)
	X			D350-602-013	HELI-UTILITY-POD™, LH
		X		D350-602-014	HELI-UTILITY-POD™, RH
			X	DSI9052-013	QUICK RELEASE KIT
1				D2694	POD ASSEMBLY (LH OR RH)
	1			D3322-041	POD ASSEMBLY (LH)
		1		D3322-042	POD ASSEMBLY (RH)
1	1	1		*D2202-1	POD LID
1				*D2202-3	POD BASE
	1	1		*D2202-5	POD BASE
5	5	5		*D2204-9	LATCH
1	1	1		*D2429-041	SPRING CLIP ASSEMBLY
1	1	1		*D2461-1700	NEOPRENE 'D' SEAL
5	5	5		*D2528-1	BACKER PLATE
4	4	4		*D2528-3	BACKER PLATE
1	1	1		*D2569	HINGE
1	1	1		*D3007-041	PROP ASSEMBLY
1	1	1		** D2012-107	CLEVIS
2	2	2		** D2022-101	SPACER
1	1	1		** D2705	SUPPORT BRACKET
1	1	1		** D3007-1	STRUT
1	1	1		** D3015-3	LOCKNUT
1	1	1		** AN4-10A	BOLT
1	1	1		** AN960JD416	WASHER
1	1	1		** MS21042L4	NUT (OR MS21042-4)
1	1	1		** SL69-BS	BALL STUD
1	1	1		** AN960JD516	WASHER
19	19	19		AN4-5A	BOLT
1	1	1		AN4-6A	BOLT
2	2	2		AN526C632R7	SCREW
21	21	21		AN960JD416	WASHER
2	2	2		AN960JD6	WASHER
2	2	2		MS21042L06	NUT (OR MS21042-06)
20	20	20		MS21042L4	NUT (OR MS21042-4)
4	4	4		D4091-1	LUG
4	4	4		D3910-3	LUG
1	1	1		D2258-160	LABEL
1	1	1		D2324-1	STRUT ASSEMBLY
2	2	2		D2523	MOUNTING BRACKET
2	2	2		D2524	SIDE PLATE
1	1	1		D3495-1	PLACARD
8	8	8		D3984-030	RUBBER EXTRUSION
4	4	4		AN3-7A	BOLT
8	8	8		AN3-15A	BOLT
1	1	1		AN4-12A	BOLT
16	16	16		AN4-14A	BOLT
4	4	4		AN4-16A	BOLT
24	24	24		AN960JD10	WASHER
42	42	42		AN960JD416	WASHER
12	12	12		MS21042L3	NUT (OR MS21042-3)
21	21	21		MS21042L4	NUT (OR MS21042-4)
			1	BLRS-010	QUICK RELEASE PIN (1" GRIP)
			3	BLRS-020	QUICK RELEASE PIN (1.5" GRIP)

* INCLUDED IN D2694 OR D3322-041/-042 POD ASSEMBLIES LISTED ABOVE

** INCLUDED IN D3007-041 PROP ASSEMBLY LISTED ABOVE

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE #02)

DATE: 10.04.23
CERT. NO.: SH93-97
ISSUE NO.: 4

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN		
CHECKED		DRAWING NO. REV. B
MFG. APPR.	N/A	DSI 9515 SHEET 2 OF 4
APPROVED		TITLE SCALE
DE APPR.		LUG MODIFICATION NTS
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REFERENCE ONLY

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-602 REV E (OR EARLIER REV.)
AND INSTRUCTIONS FOR CONTINUOUS AIRWORTHINESS ICA-D350-602 REV. 0

REF. TCCA STC: SH93-97

REF. FAA STC: SR01144NY

REF. EASA STC: EASA.IM.R.S.01290

PURPOSE

Dart Heli-Utility-Pods D350-602-011 @ CHG 006 and D350-602-013/-014 @ CHG 002 have new attachment lugs.

CHANGE

The D2230-1/-3 clamps are replaced with wider D4091-1/D3910-3 lugs. The abrasion strip is replaced with D3984-030 rubber extrusion. The D2462-1700 Neoprene Seal is replaced with D2461-1700 Neoprene 'D' Seal. The modified parts list for Installation Instruction D350-602 and Instructions for Continued Airworthiness ICA-D350-602 is shown on sheet 2 of this service instruction. Install the lugs as shown in Figure 1 & 2 of this service instruction. The pod should otherwise be installed per D350-602 and maintained per ICA-D350-602.

The weight and balance for Dart Heli-Utility-Pods D350-602-011 @ CHG 006 and D350-602-013/-014 @ CHG 002 (or later) are updated as follows:

5.0 WEIGHT AND BALANCE (D350-602 Rev. E)

25.6 WEIGHT AND BALANCE (ICA-D350-602 Rev. 0)

The following weight and balance information is for the Dart *Heli-Utility-Pod™*. The weight and balance of any parts that are removed from the aircraft to perform this installation or equipment installed/stowed in the pods are the responsibility of the installer.

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D350-602-011 @ CHG 006	61.2 lb	±51.0 in	±3121 in-lb	135 in	8262 in-lb
Heli-Utility-Pod™ LH or RH	27.8 kg	±1.29 m	±35.9 m-kg	3.43 m	95.4 m-kg
D350-602-013 @ CHG 002	61.2 lb	-51.0 in	-3121 in-lb	135 in	6872 in-lb
Heli-Utility-Pod™ LH	27.8 kg	-1.29 m	-35.9 m-kg	3.43 m	79.2 m-kg
D350-602-014 @ CHG 002	61.2 lb	+51.0 in	+3121 in-lb	135 in	6872 in-lb
Heli-Utility-Pod™ RH	27.8 kg	+1.29 m	+35.9 m-kg	3.43 m	79.2 m-kg

LUG UPGRADE KIT

The Dart DSI-9515-011 kit is available to upgrade D350-602-XXX Heli-Utility-Pods made to earlier change numbers with D4091-1 / D3910-3 lugs. The lugs should be installed per Figure 1 & 2 of this service instruction.

QTY -011	Part Number	Description
X	DSI-9515-011	LUG UPGRADE KIT
4	D4091-1	LUG
4	D3910-3	LUG
8	D3984-030	RUBBER EXTRUSION
16	AN4-14A	BOLT
32	AN960JD416	WASHER (OR NAS1149DO463J)
16	MS21042L4	NUT (OR MS21042-4)

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DAO # 01-O-01

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D. SHEPHERD (DE # 02)

DATE: 10.04.23

CERT. NO.: SH93-97

ISSUE NO.: 4

B	NAS1149DO463J WAS xDN432J & CHG QTY	CP	10.04.23
A	NEW ISSUE	CP	10.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9515	SHEET 1 OF 4
APPROVED		TITLE	SCALE
DE APPR.		LUG MODIFICATION	NTS
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